John Bekiaris
HMR USA

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Presentation: Lessons learned case study

I've been asked to talk about reuse. Our company is a little bit different than the two gentlemen who spoke prior to me. We do a lot more reuse of higher end equipment. What I want to talk about is reuse the new excuse or is there secondary market for used IT equipment.

I'll give you brief history on HMR USA. We are part of the HMR Group which has facilities around the world: Australia, Philippines, Malaysia, we have sister companies there. They range from indent trading, chemical companies, auction centers, franchise stores, but our U.S. Company is asset recovery. We're not a recycler. I guess we're classified as an electronic waste collector, and I'll explain what that means and show you through our process as we go along. We have 3 facilities. We're in the West Coast of the United States: San Francisco, Los Angeles, and Sacramento. We have approximately 300,000 square feet of facility and like everyone said it's always a battle to get enough equipment to keep the turnover working there. We have been in business for 20 years. We have evolved from precious metals recovery company, and we were fortunately to have the first crusher in California and be the first out to have a crusher in California. We became a refurbishing company there where we were able to repair a lot of equipment and sell it through our international channels. As mention we were an e-waste recycler, and now we've become a service based asset recovery specialist.

HMR provides end of life asset disposal solutions to small and large corporations, government departments, and original equipment manufacturers across the United States. We don't do curbside. We don't really do a lot of collection events. There are a lot of niches in the industry allows companies to make money and be a profitable business. We work with the companies up here as our downstream partner. So as the industry grows, you learn to work with each other and you don't all need to do the same thing. So as you see our businesses do cross over with each other. So I guess the question is what reuse is. A recent article in U.S. Today, Jim Puckett of Basel was quoted as saying "reuse is the new excuse; it's the new passport to export." What he's referring to there is the amount of electronic waste that is simply put into containers and sent overseas without any qualification, testing, any tear down. Everything you saw today, the exact opposite. Stick it into a container and send it out. That is a big problem. I would say 75%, the article showed, of what is coming through the United States is going out in an as-is condition untested. So that is one of the big problems that come up.

To quote Webster's Dictionary "using a product or component or municipal solid waste in its original form more than once, a recovery of a product in its existing form by utilization of the properties of the product." That gives you a little bit of a comparison. So we provide our customers three end of life options: the reuse side there where equipment is tested, repaired or refurbished and sold to be used in its original manufactured purpose. It's very simple. Recovery, already mentioned: parts and components cannibalized that are sold for reuse or sent to specialist mineral recovery companies. So we may pull a computer apart and take out the hard drive or the memory for spare parts. The third option is sending it to a recycling partner. Obsolete and nonfunctioning equipment is physically destroyed and returned to primary commodities through all the lovely processes we were shown prior. I think you're all educated on that now.

So when we talk to customers, what are they saying to us? Here are some of the things: we want value recovery. They got equipment, and they paid a lot of money for it. We want some money back. That's fair. We want to be environmentally compliant. Sometimes they don't know what that means, but they want to be environmentally compliant. We don't want our products on the secondary market. That happens. Some manufacturers don't want their products on the gray market. It kills the secondary market so they can manufacture new products. It's part of their business plan. We want our data destroyed. Sensitive information is out there: social security numbers, tax information, health information, and all the

things you wouldn't want on CNN. We want to be socially responsible. A lot of companies want to donate equipment. There are donation programs out there. People want some of their equipment to go to nonprofits, to schools, to startup companies, and when that happens we're able to facilitate that on their behalf. We want to protect the environment. A lot of companies are developing corporate responsibility. They want to help prevent this equipment from going to landfill. As the industry evolves, you'll see that companies are prepared to pay for that. They are prepared to stand up and put money where their mouths are. That's very important.

A new thing coming up is "we want to be green." What does green mean? They don't know, so we try and help them define that. "Management says we want to be green." It's something that just pops up there, and they don't really have a documented process. They don't want any liability. You take it, you get rid of it.

The last one: we don't want to pay for it. It doesn't matter how long your industry evolves, they still don't want to pay for it. Probably 90% don't, but 10% do. There are ways to teach companies to find value in their equipment. To shorten the life cycle or to budget it in the cost of purchasing new equipment and they can put that with the original equipment manufacturers when they're buying new equipment. Tell them that they want disposal programs build into the cost there and force the manufacturers to do it. It creates more work for us.

There are other driving factors, and I know a lot of these have been touched on. You have your industry groups, and you all can read that. Some of these people have spoken today and some are sitting in the audience here. We have the local, state, and international laws. We have the governing bodies who watch what we do, who we report to, and make sure that all the documentation and reporting is submitted.

Corporate governance, as we said, senior management, directors and what they want done. Compliance and liability risks, and of course negative publicity. You'll see articles with cities and counties with their asset tags sitting on there sitting in a landfill in China. That really doesn't go down too well. What is liability? Someone mentioned before that there are approximately 25 laws that govern what happens with information on hard drives. Here is an example, I'm not going to go into them all in great detail, some of you may know of HIPAA regulations which are your medical and private information. It fines up to $250,000 and 10 years in prison per violation. That's a pretty hefty fine not to pay $25 to dispose of a system, but there are companies taking that risk. This information you can find on many websites of asset recovery companies in the United States. Look them up and they'll have links to all these different legislative penalties. And of course, propriety information; trade secrets, scientific companies have their research out that they don't want to share with competitors, so sensitive data is an important driver there for the liability side.

So I just want to get into how our disposal process works and how it leads to the reuse/recycle portion there. So we spent some time educating our clients on their disposal options, and we create a service agreement that then identifies their preferred method. Do they want it destroyed? Do they want it back in the secondary market? Do they want it donated to a nonprofit? They identify what they want done. Of course it's got to be within the realm of what we provide. If they want it thrown into a landfill, we can't do that. They can go to another vendor.

So equipment is received, it's tracked using proprietary software though our facility from point of entry to point of exit. So we've spent our money not on heavy machinery but more on data tracking technology so that we're able to tack the items all the way through our facilities so that we can provide a detailed report of what was reused, what was recycled, and who it went to. So we know what we're responsible for. We know what we sent to Bob and what Bob is responsible for so that we can chase Bob if something bad happens. We generate asset reports, hard drive erasure and destruction certificates, and we can also do annual reports, disposition reports. There are so many fields in our system, I think 57 fields or that might be Baskin Robbins, but there are a lot of fields and we can always add more fields. Our equipment is sold for reuse or sent to qualified recycling partners for destruction. One of the luxuries we have, there are 65 recycling companies in California alone, and so there are a lot of options. There are a lot of ways to qualify those companies coming from that industry that helps us out because we know what to look for. There are

a lot of governing bodies that tell us what to look for. There are organizations with checklists and Excel spreadsheets, so it's not that difficult for us to find vendors who are doing the correct thing.

Just to take you for a walk through our facility, it's cheaper than flying you all up to San Francisco, and so we'll do it this way. This is our San Francisco facility (on slide). Very simple, the client delivers or request a pickup, the pickup is completed, we give it a job number, the client gives us their customer PO, and so everything is tracked through the original number. The equipment is received in, and every unit is weighed or by the pallet and we give it a packing ID. So you have the original job number and the packing ID. So if we received 20 pallets of equipment there's going to be 20 packing IDs that track back to that original job number. So that's the start of the process. We can report what we receive din our facility. The sorting team reviews the client instructions for reporting. As I said, we sat down with the client, we decided what fields they want captured, and we decided what they wanted to happen with the equipment. So the contract pops up in our system, and they fill those fields accordingly. Each pallet or cart with a packing ID is broken down into individual pieces so those individual pieces then are giving a unique HMR tracking ID. We're able to track the individual items from that specific load from the packing to the job number. This is all propriety so no one is allowed to share this information.

Data capturing: you tell us what you want reported. We have data fields that are captured as per the client service agreement. We do a quick sort if they don't tell us what they want to do; we capture the weight and the description. So 400 pounds of CRTs, that's the simplest amount of information that we'll put in there because we need to report the weight to the governing bodies there. In a basic sort we capture makes and models. So it might be an IBM computer, 400 pounds, or X amount of units. Then we have contract specific data fields in which they may want to know the configurations, how big the hard drive was. They want to match it up with the original invoice it went out so they can do a validation because a lot of purpose for these reports is that companies can then take those assets off the books. It's another tax benefit for them where they're not depreciating assets that have been disposed of. They know that they are disposing of their assets, they're not sitting on the books, and they're not depreciating. Then we have a detailed sort where we capture the make, model, the serial number, and the asset tag. That's probably as detailed as most people want. Internal policy is to remove all identifying asset tags and company marks. So if it had an EPA logo on there, sticker, or asset tag we remove that tag off because we're assuming the liability. Part of our service contract is we assume the liability. They get a receipt by serial number that we have taken that equipment. It's a lot more difficult to prove what you gave me if I give you a report saying 20,000 pounds. 20,000 pounds of what? Was that computer that ended up in the landfill given to HMR? So we provide that. The asset tags are destroyed. Some companies want us to return the asset tags. The information on the asset tags is then captured into the database so we can track that asset tag. Again, we have the responsibility of that unit. We have a tech department. Our technicians are cross trained. They can do laptops, computers, networking equipment, monitors, and LCDs. We don't test a lot of CRTs because they are reaching the end of life. They are becoming an obsolete product on the secondary market.

Units are given a visual inspection for cosmetic damage. So for a laptop: are the hinges cracked, is the casing cracked, is it missing components, is there no adaptor, and is there no battery, so very obvious things that can qualify whether it should be recycled. Once it's missing multiple components, it's not worth rebuilding that machine. San Francisco is a very expensive city so you need to really have your cost controls in place, and one of the things you can learn here is that you have a lot lower cost of labor so you can really get a lot more efficiency out of physical dismantling. I'm sure you guys would be happy if you had the same cost of labor to dismantle. It would make it a bit easier. That's one advantage you do have here, plus our mistakes that you can learn from. Qualified equipment is tested and parts are added to incomplete units. So if we do get a laptop in that is missing a hard drive, we have adequate spare parts. We know what our inventory turns are. If there is a damaged unit, we can use those parts back in the other units. So we can fix units and put them back out on the secondary market. Then the condition details are captured into our database. So every unit with its unique ID has a very detailed make, model, serial number and now we know the configurations, now we know if it's a laptop, Pentium 3, it's a 1 gig, it has 256 Meg memory. So when we sell it, we just scan that ID, send a list to buyers around the world, and they can see the configurations of the equipment. They know what they're getting. So they then have a check list on the other end to receive what they purchased.

Hard drive sanitization. Sounds like janitorial services, but all drives that come into our facilities receive a single pass. I think DOD minimum requires a triple pass. Occasionally what happens with the software is that you'll find bad sectors, so you can't overwrite the full hard drive, so what happens is that the drive needs to be physically destroyed for it to be canceled correctly. We then track those drives by the serial number on the hard drive. Again, the responsibility is transferred to the specific drive in our system. They receive a receipt for that. All failed drives are physically destroyed and the DOD wipes are entered into the database and tracked by the unique IDs and serial numbers. I would reiterate that hard drives are the most important thing for corporations in America right now. It is the most important thing in their decision making process. Yes environmental is, but they would rather you come on site and physically destroy a $15,000 server and pull the drives out of that because they don't want it back out on the market. The risk is way too high.

So reuse or recycle? Equipment may be used for parts recovery or sold as tested working items. Obsolete or damaged equipment is sent to pre-qualified recycling partners in California. All sales and disposals are tracked back to the original job number. So how do we qualify what is obsolete and what is not obsolete? We don't dictate that. The secondary market does. People aren't going to pay $100 for a Pentium 1 computer. They're going to pay cents a pounds because it's a commodity. We're not a commodity trader, so if it's in the commodities section, it goes to these guys. It's not worth us putting our technicians onto that job. Having technicians in California working on a Pentium 1 computer is not cost effective.

So equipment is sold to local and international buyers. Not everyone wants second hand computers in California, but there are buyers around the world. There is a large market. They are buying brand new computers there, so if they can buy a 3 year old unit that has tested working, it saves them a lot of money at the same time. We're required to do export notifications for items sold overseas. Typical as when we sell a container, the value is in the $50,000 - $100,000 range. It's not scrap equipment. We're able to track all the line by line items on there, and the value of that equipment is not justified as scrap. It's cents per pound and you have to fit 10 containers into 1. So our clients also request that the items are redeployed back into their environment. It might be shutting down certain facilities so we provide a report and they shoot that back out into a working environment. If it's good and qualified, they can reuse that equipment themselves. Sometimes it is leased and needs to go back to the original equipment manufacturer. So we give them the serial numbers, they choose the items, and we ship that back to the company itself. Here is a sample of the asset reports. I think that one has 7 fields: make, model, category, serial number, asset tag, quantity, and unit. It's pretty simple. It's what they ask for. It's in a spreadsheet format. We've got a web based application. That client can give the original job number that we gave them from the start and pull up all this information. If they need to keep it on record for 7 years, this simplifies that process for them. A lot of companies do this manually. They have interns filling out this information. It's a lot of work. We provide disposition reports.

Here is a sample of one client we did. I think it's approximately 80,000 pounds of equipment was received in this load. So that asset report is then categorized into these specific fields because that is what this client wanted. We actually sold 24% of the equipment that came through in good working order. So we have the invoices that match those job numbers. The commodities, you've got cold storage units occasionally. We deal with biotechs, so we have refrigeration equipment. In commodities we get steel tanks from those types of companies. It just gives you an example of how they have an internal program and they can say "we sent 80,000 pounds of equipment to HMR, here is the disposition of it all, and here is the downstream." We actually identify our downstream vendors so they are able to see where the equipment went to. So I think the word "transparency" has been thrown around. That is important. It's not rocket science what we do. It's just better, more efficient processes where you manage cost well. So who qualifies to buy for reuse? We prefer buyers who are able to demonstrate the ability to comply with the import regulations of the destination country. If they can't, we can't sell it to them. We don't deal with smugglers. If they run transparent operations that are subject to site inspections so we can go in and have a look at what they do with the equipment. It's very simple. We get audited, they get audited. They have to demonstrate financial stability. We need to get paid. I got to pay the rent. That's how it works. They can identify downstream partners for damaged, returned, or failed merchandise. That's a hard one when you are sending to 3rd world countries because that's not established. People don't know what to do with that equipment. We're fortunate that we have in Asia two recycling facilities so we are able to take that equipment back ourselves.

So we do have our own distribution channel, but there is a far larger market. I say the demand of second hand equipment is 10 times that of what we have through our facility right now, maybe more, but just from our current customers.

So is reuse an excuse or is it a secondary market for used IT equipment? I'd like to think so because we'd be out of business if there isn't. So in the absence of regulated guidelines, electronic waste collectors will interpret the reuse in a manner that best suits their business model. That's what's happening out there right now. Well we said it's reused, no one is checking it, and it's a big problem. It is the responsibility of those disposing of the equipment to qualify ethical vendors who can provide auditable tracking of their sales and disposal channels. I say that and people say "it's not really our problem. You're a registered collector." But they do need to go and have a look at those vendors. I think it's very important. We spend a lot of time and a lot of research and made a lot of mistakes to get to the point where we are. So if you're sending your equipment to someone who has a fancy website, that's not good enough. That's your fault, shame on you. So in turn, it's a responsibility of those vendors to provide the services agreed upon, and that's why we have service contracts. That's why we have $2,000,000 air emission liability insurance. If we make a mistake, it's got to be backed up with something. So the advantages of reuse I think we've gone over that. It provides a correct disposal of obsolete equipment. It provides funds for that.

I'll give you an example of a recent job we did. We pulled out 500 laptops, all good working equipment. The company had no budget to dispose of the CRTs, the electronic waste was spread in multiple locations, but the value we were able to recover and give back to the client paid for the correct disposal. So depending where they dispose of that equipment in their life cycle, they can find the money even though they don't have it. When they run it into the ground, when it's 10 years old, there is no value in that equipment. It is a commodity. So it is up to the companies to manage that a little better. It provides technology to developing countries. Why should you pay $1,200 for a laptop when you can get a 3 year old unit for $150? You can afford that. It makes sense. It extends the life cycle of usable products. Why destroy such nice equipment? We get very high end equipment through our facility. Typically it is Pentium 3 or 4 type laptops that come through. I guess that's a little walk through our facility. It shows the reuse side. We deal in a lot more than computers and IT equipment. We do scientific equipment, lab, medical test, measurement, but I'm trying to keep it specific to things that everyone understands here today.

So here's my contact information (on slide). I know there are electronic copies available for everybody at some stage. So if you need that, you can contact us. If you have any questions, or if anyone is in San Francisco for some reason, you are welcome to come through our facility and like I said nothing too proprietary there. I just want to thank you for your time.